

# **Update on California's Covered Electronic Waste Recycling Program Implementation of the Electronic Waste Recycling Act of 2003 (SB 20, Sher)**

**March 2013**

All program responsibilities of the former California Integrated Waste Management Board (CIWMB) have been transitioned to the Department of Resources Recycling and Recovery (CalRecycle).

## **Overview**

The Electronic Waste Recycling Act of 2003 (Act), as amended and as codified in the Public Resources Code (PRC) 42460, et seq, established a funding mechanism to improve and provide for the proper end-of-life management of certain hazardous electronic products. The program is funded through a fee paid by consumers of covered electronic devices (CED) at the time of retail purchase. Collected fees are remitted by retailers to the State and deposited in an account. Subsequently, payments are made to approved collectors and recyclers of covered electronic waste (CEW) to offset the average net cost of appropriate waste recovery, processing, and recycling activities.

## **Intent of the Act:**

- Provide financial relief to responsible parties for managing covered electronic waste
- Foster cost-free recycling opportunities for consumers throughout the state
- Reduce illegal dumping
- Eliminate the stockpile of waste computer monitors/TVs
- Decrease amount of hazardous materials in covered products

## **Major Components of the Act:**

- Assesses an electronic waste recycling fee on retail sales of covered electronic devices (CED).
- Tasks the Department of Resources Recycling and Recovery (CalRecycle) with administering a payment system for collectors/recyclers to cover the costs of recovering/recycling CEW.
- Authorizes the Department of Toxic Substances Control (DTSC) to develop regulations for the proper management (storage, collection and recycling) of discarded electronic devices.
- Requires DTSC to adopt regulations, consistent with the European Union's Restriction of Hazardous Substances (RoHS) directive, limiting the concentration of hazardous metals in covered electronic devices offered for sale in California.
- Establishes certain manufacturer responsibilities: consumer information, brand labeling, annual reporting, product design for recycling, and reduction of hazardous materials

## **Covered Electronic Devices (CED)**

CEDs are video display devices that have been determined by the Department of Toxic Substances Control (DTSC) to be hazardous when disposed. Covered devices must have screens greater than four inches on the diagonal. Unless excluded by PRC 42463(f)(2), current covered devices include:

- Cathode Ray Tube devices
- Televisions and computer monitors containing cathode ray tubes (CRTs)
- Televisions and computer monitors containing liquid crystal displays (LCDs)
- Laptop computers w/ LCD screens
- Plasma televisions
- Personal portable DVD players w/ LCD screens

## **Revenue and Payment Status**

CalRecycle is charged with statutory obligations to adjust the consumer fee in order to maintain fund solvency.

***In July 2012, CalRecycle acted to lower the consumer recycling fee in an effort to reduce excess fund reserves. This change took effect January 1, 2013.***

**Annual Gross Revenue** (from Governor's FY 12/13 Budget Projections):

**FY 09/10 ~ \$175M; FY 10/11 ~ \$156M; FY 11/12 projected ~ \$95M; FY 12/13 projected ~ \$102M**

- Consumers pay fee to retailers at time of new device purchase based on the screen size
- **In July 2012, CalRecycle acted to adjust the fee to better manage fund reserves. Effective January 1, 2013, the fee is \$3, \$4, and \$5, depending on screen size.**
- Retailers remit collected fees to the Board of Equalization and retain 3% for administrative costs.
- Manufacturers are required to notify retailers regarding which products are subject to the fee.

**Covered Electronic Waste (CEW) Payment System** (as of March 2013):

**Approved Collectors: ~605**

**Approved Recyclers: ~55**

- Growth in California's electronic waste collection and recycling infrastructure has been fostered by the Act and the CEW recycling payment system.
- Voluntary participants represent a diverse group: non-profits organizations, landfills, local governments and traditional e-waste collection and recycling businesses.
- DTSC inspections of recycling facilities and compliance with environmental standards are required for participant approval and eligibility to receive payments.
- The infrastructure to recover CEW also recovers substantial quantities of miscellaneous electronic waste, the handling of which is not directly funded by the CEW payment system.

***CalRecycle pays approved recyclers; approved recyclers are required to pay collectors. The current combined recovery and recycling payment rate is \$0.39 per pound.***

**Payment Statistics to Date:**

- Approximately 2,470 claims submitted by recyclers for payment since January 2005
- Approximately \$ 585 million (representing approximately **1.38 billion pounds** of recycled covered electronic waste) have been claimed through the CEW payment system since January 2005
- Mean claim size: ~\$240,000; Median claim size: ~\$130,000

**Year to Year Comparison (based on claim reporting month):**

- 2005 total 225 claims submitted: \$ 31 M (~ 65 M pounds)
- 2006 total 298 claims submitted: \$ 61 M (~128 M pounds)
- 2007 total 351 claims submitted: \$ 89 M (~185 M pounds)
- 2008 total 412 claims submitted: \$ 96 M (~218 M pounds)
- 2009 total 315 claims submitted: \$ 73 M (~186 M pounds)
- 2010 total 254 claims submitted; \$ 75 M (~194 M pounds)
- 2011 total 303 claims submitted; \$ 77 M (~ 198 M pounds)
- 2012 thus far ~314 claims; ~\$83 M (~ 212 M pounds) – *Possibly not a complete year*
- 2013 thus far ~14 claims; ~\$6 M (~ 15.4 M pounds) – *Not a complete year*

***CalRecycle has annually denied between 1% and 12% of moneys claimed in the CEW system due to non-compliant or significantly inconsistent documentation. Current total payment denial is about \$25 million (~5% of claimed) over life of program.***

**Compliance Assurance and Fraud Prevention:**

- CalRecycle works closely with DTSC to ensure material handling compliance. The departments had an MOU that delineated fraud investigation responsibilities. CalRecycle now works with the Department of Justice, Bureau of Investigation on fraud matters.
- CalRecycle retains broad authority to deny participation and/or payment.
- Through the FY 2012/13 Budget Act, CalRecycle secured statutory authority (SB 1018) to impose civil liabilities on persons who make false statements in documentation required by the program.

## Current System Challenges

- CalRecycle must ensure that payment is made in a timely manner only for eligible and properly documented CEW; specifically through complete and verifiable payment claims, including appropriate source, collection, transfer, processing, and residual disposition documentation.
- The program must accommodate continued use (resale, reuse) as a possible destination for recovered CEW, but only pay for recycled CEW.
- The program must allow for certain instances of otherwise eligible (California-sourced) covered electronic wastes resulting from illegal abandonment and load check activities to enter the payment system while simultaneously not creating a portal for fraudulent activities.
- The use of “handlers” not directly approved in the CEW system by approved recyclers and collectors has exposed system participants to increased risk of falsified collection documentation.

## **Future Markets for Residual CRT Glass Uncertain:**

- Residual CRT glass must be managed as a universal waste or as a hazardous waste depending on ultimate disposition of the glass; the burden of compliance is on the California glass handler.
- Recycling residual CRT glass into new CRTs has limited outlook since CRT technology is being replaced by flat screen technologies, such as LCDs.
- Smelter feedstock/flux continues to be option; but limited domestic destinations, higher cost.
- New recycling applications need to be explored, vetted; disposal may need to be considered.

## Costs of Managing Non-CRT CEW:

- Approximately 99% of CEW claimed since 2005 has been CRT devices; program now is seeing increasing amounts of non-CRT devices, which have different recycling economics.

## Non-CEWs: How Best to Manage Rest of E-waste Stream?

- Mixed e-waste (non-CEW) volumes are substantial and in aggregate have nominal value.
- CEW collectors and recyclers are expected by consumers to handle mixed e-waste at no cost; most are able to accommodate.
- No State-level restrictions exist on wholesale export of miscellaneous e-waste; however substantial domestic processing and “de-manufacturing” is occurring.
- All e-waste handlers/processors are required to report activities, including exports, to DTSC.

## **Other Program Implementation Activities**

### **Regulations:**

- The Office of Administrative Law (OAL) approved emergency regulations issued by CalRecycle relating to fee level changes in fall 2012, with new fee levels effective January 1, 2013.
- DTSC issued new emergency regulations for residual CRT glass management effective October 15, 2012, that potentially created pathways to non-traditional recycling applications and the possibility of proper disposal, as well as established more stringent disposition documentation.
- If necessary, CalRecycle will engage in emergency rulemaking pursuant to the Act to address changes in CRT market conditions and new management rules promulgated by DTSC.
- CalRecycle will soon begin working on emergency regulations to implement new administrative authorities to impose civil liabilities of persons who make false statements (PRC 42474(d)).

### **Recent Legislation:**

- Four bills were introduced in the 2011/12 session relating to electronic waste management – AB 549, AB 583, AB 794, and AB 960. [AB 549](#) passed. (<http://www.leginfo.ca.gov/index.html>).
- Two bills have been introduced in the 2013/14 session relating to electronic waste management – AB 1022 (Eggman) and AB 468 (Chesbro).

## Annual Net Cost Reporting

- Program participants must report annually on costs to handle and process CEWs if so directed by CalRecycle. This information is used to inform CalRecycle in fulfilling its obligation to adjust payment rates.
- CalRecycle determined in June 2012 that Net Cost Reports covering 2011 operations indicated that no changes should be made to the existing payments rates.
- Net Cost Reports covering 2012 operations were required to be submitted by all CEW program participants on or before March 1, 2013.
- Under existing statute, the next opportunity for CalRecycle to make changes to the payment rates (schedules) will be July 1, 2014.

## Other States and Federal Government:

California is monitoring activity on the national level. Approximately two dozen states have passed legislation, all taking more of a producer responsibility approach. A large CEW program challenge -- ensuring payment only for California material -- would be minimized or eliminated by a national-level program. However, any national system should provide cost relief to local governments and not contradict the hazardous waste/universal waste management standards adopted by DTSC. The Act specifies conditions under which a national program would preempt the Act (PRC 42485 (a)).

## Outreach and Other Resources:

- CalRecycle maintains a public oriented web address ([www.eRecycle.org](http://www.eRecycle.org)) to inform the public on environmental matters associated with the management of electronic waste, including a directory of recycling opportunities throughout California.
- The Board of Equalization website contains Frequently Asked Questions, registration information and registration forms. ([www.boe.ca.gov/sptaxprog/ewaste.htm](http://www.boe.ca.gov/sptaxprog/ewaste.htm))
- The Department of Toxics Substances Control website contains information on covered devices, hazardous waste management standards, and regulatory requirements. (<http://www.dtsc.ca.gov/HazardousWaste/EWaste/>)

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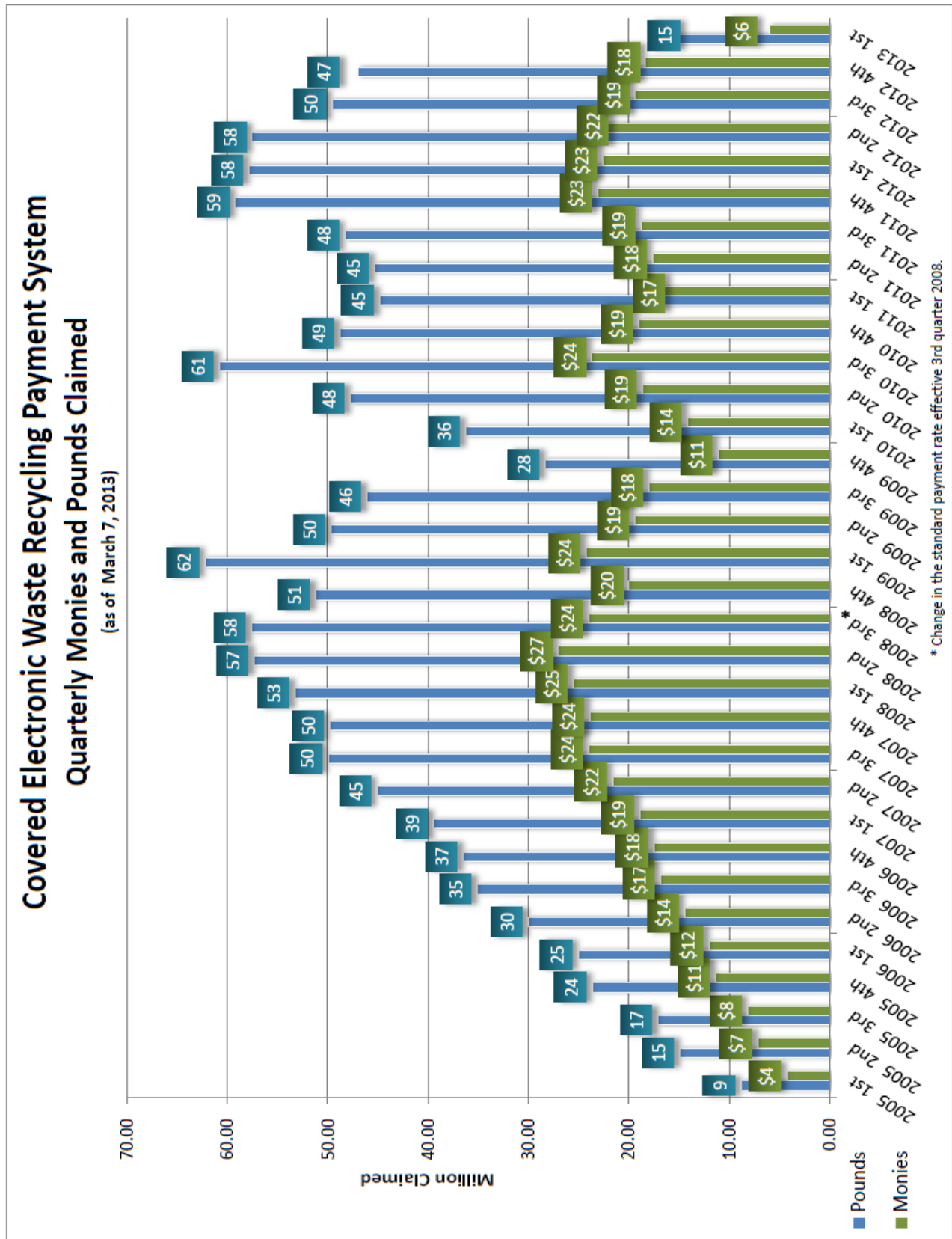
## \*Comments on Quarterly Claim Chart (Next Page)

The depiction of claim volumes in the chart reflects the general growth of the program since its inception in January 2005. Factors affecting the fluctuating volumes in the program include infrastructure development, a lowered payment rate (effective July 2008), economic uncertainty, the digital television broadcast transition in the first half of 2009, and the fundamental availability of recycling opportunities over the past five years that has recovered much of the legacy stockpile.

Recyclers must ship CRT glass to qualifying destination prior to submitting a claim. CRT glass market disruptions in October 2009 involving Mexican destinations dramatically impacted claim submittals beginning 4<sup>th</sup> quarter 2009. The industry has recovered somewhat, but ongoing CRT glass market uncertainties may be impacting recyclers' ability to submit claims regularly.

Recyclers are required to submit claims within 45 days of the end of a claim reporting month, which leads to a delay in the tracking of program volumes. For instance, December 2012 claims aren't technically due until approximately February 15, 2013. However, it is not uncommon for recyclers to incur market conditions that can delay a claim submittal and CalRecycle has yet to enforce on this requirement.

Question concerning this document may be directed to Jeff Hunts, Program Manager, at (916) 341-6603 or [jeff.hunts@calrecycle.ca.gov](mailto:jeff.hunts@calrecycle.ca.gov)





# Covered Electronic Waste (CEW) Recovery & Recycling Payment System

